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Appl. No.: 09/921,323 Confirmation No.: 5051
Applicant(s): Gillespie et al.
Filed: August 2, 2001
Art Unit: 1794
Examiner: Jennifer A. Steele
Title: SPUNBOND NONWOVEN FABRICS FROM RECLAIMED
POLYMER AND THE MANUFACTURE THEREOF

Docket No.: 034423/237429
Customer No.: 00826

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**CORRECTED APPEAL BRIEF TRANSMITTAL
(PATENT APPLICATION – 37 C.F.R. § 41.37)**

In response to the Notification of Non-Compliant Appeal Brief mailed January 27, 2009 and the Order Returning Undocketed Appeal To Examiner dated January 21, 2009, applicant encloses herewith corrected pages 1 – 4 of the Appeal Brief. Please substitute these pages for the substitute pages 1 – 4 of the Appeal Brief that were submitted on March 4, 2008.

Respectfully submitted,



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CORRECTED APPEAL BRIEF UNDER 37 CFR § 41.37

This Appeal Brief is filed pursuant to the "Notice of Appeal to the Board of Patent Appeals and Interferences" filed December 18, 2007 and in response to the Notification of Non-Compliant Appeal Brief mailed February 29, 2008 and January 27, 2009.

1. ***Real Party in Interest.***

The real party in interest in this appeal is Fiberweb Simpsonville, Inc., the assignee of the above-referenced patent application.

2. ***Related Appeals and Interferences.***

Divisional application No. 10/437,170 filed May 13, 2003 is also under appeal.

3. ***Status of Claims.***

Claims 1, 4 – 10, and 29 – 30, which are all of the claims in this application, are under Final Rejection. These are the claims on appeal. Claims 2 – 3 and 11 – 28 have been cancelled. The Advisory Action of November 5, 2007 and the summary page of the Final Rejection of September 18, 2007 incorrectly refer to claim 20, which has been cancelled. The Final Rejection incorrectly refers to claims 1 – 10 as being rejected, even though claims 2 – 3 have been cancelled.

4. ***Status of Amendments.***

As indicated in the Advisory Action dated November 5, 2007, the Amendment filed on October 23, 2007 has been entered and is considered to overcome the 35 USC 112 rejection. The Terminal Disclaimer is considered to overcome the Double Patenting Rejection.

5. ***Summary of Claimed Subject Matter.***

As defined in independent claim 1, the invention is directed to a process for producing spunbond nonwoven fabric (indicated at 40 in the drawing figure). As stated at page 2 line 28 to page 3 line 16 of the specification the process comprises the following steps:

Step	Explanation
separately melting two or more polypropylene polymer components, at least one component including reclaimed polypropylene recovered from previously spun polypropylene fiber or webs comprised of previously spun polypropylene fiber;	Extruders 11 and 12 are used for separately melting the polymer components. The polymer material is typically provided in granular or flake form and fed to the extruders by supply hoppers 13, 14. Reclaimed polypropylene is fed to one hopper. Alternatively, as described at page 5 line 23 to page 6 line 2, an auxiliary feed extruder (not shown) can be used for melting polypropylene webs or filaments in order to supply molten reclaimed polypropylene to the extruder 12.
separately directing the two or more molten polypropylene polymer components through a distribution plate configured so that the separate molten polymer components combine at a multiplicity of spinnerette orifices to form bicomponent filaments containing the two or more polymer components, the polymer components being arranged in a sheath-core cross-sectional configuration, with the polymer component containing reclaimed polypropylene being present in the core, and the reclaimed polypropylene being in an amount up to 100% by weight, and with the total amount of reclaimed polypropylene in the filaments being 25% by weight or greater	See page 6, lines 3 to page 7 line 5. A spin beam assembly 20 receives molten polymer from each extruder 11, 12. Mounted to the spin beam assembly is one or more replaceable spin packs. At the downstream end or bottom of each spin pack is a spinnerette plate 22 having capillary orifices through which the molten polymer is extruded in the form of filaments. A distribution plate 24 located above the spinnerette plate forms channels for separately conveying the molten polymer streams so that the streams combine at each orifice in a sheath-core configuration, with the reclaimed polypropylene present in the core in the specified amount.

extruding the multicomponent filaments from the spinnerette orifices into a quench chamber;	The quench chamber is indicated at 30. See page 7 lines 18 to 28.
directing quench air from a first independently controllable blower into the quench chamber and into contact with the filaments to cool and solidify the filaments;	Blower 31 directs quench air into the quench chamber 30.
directing the filaments and the quench air into and through a filament attenuator and pneumatically attenuating and stretching the filaments;	The filament attenuator is indicated at 32. As the filaments and the quench air move downwardly, the cross sectional configuration of the attenuator 32 causes the quench air to be accelerated, and the entrained filaments are attenuated and stretched.
directing the filaments from the attenuator into and through a filament depositing unit;	The filament depositing unit 34 randomly distributes the filaments.
depositing the filaments from the depositing unit randomly upon a moving continuous air-permeable belt to form a nonwoven web of substantially continuous filaments;	The randomly distributed filaments are deposited onto a moving belt 40. Page 7 line 29 to page 8 line 8.
applying suction from a second independently controllable blower beneath the air-permeable belt so as to draw air through the depositing unit and through the air-permeable belt; and	A suction unit 42 beneath the belt 40 assists in the lay-down of the filaments on the belt. Page 8 lines 1 to 8.
directing the web through a bonder and bonding the filaments to convert the web into a coherent nonwoven fabric.	A bonder, shown in the drawing in the form of a pair of heated calender rolls, bonds the filaments to form a coherent nonwoven fabric. Page 8 lines 14 to 20.

Independent claim 7 recites a similar sequence of method steps, but is more specific in that the first polymer component is defined as comprising virgin polypropylene and the second polymer component comprises reclaimed polypropylene, and wherein the first component forms the sheath and the second component forms the core. See page 9 lines to 16.

Independent claim 10 begins with the step of reclaiming polypropylene from previously spun polypropylene fiber or webs comprises of previously spun polypropylene fiber, followed by separately melting a first polymer component comprising virgin polypropylene and a second polymer component comprising the reclaimed polypropylene. See page 3 lines 17 to page 4 line 3. The subsequent steps are similar to claim 7.

Independent claim 29 recites a series of steps similar to claim 7, but is more specific in defining how the first and second molten polymer components are directed through a series of plates of the spin pack and distribution plate, including a top plate with inlet ports, a metering plate, a spinnerette plate 22 and a distribution plate 24. See page 6 lines 16 to 31 and Fig. 1.

Independent claim 30 also recites a series of steps similar to claim 7, but is more specific in defining a spin beam assembly 20 with spin packs, a spinnerette orifice density of at least 2000 orifices per meter, and that the distribution plate is a thin etched distribution plate. See page 6 lines 3 to 15.

6. ***Grounds of Rejection to be Reviewed on Appeal.***

Claims 1, 4 – 10, and 29 – 30 stand rejected under 35 U.S.C. 103(a) as being obvious over Hills US 5,162,074 in view of Geus et al. US 5,814,349 and further in view of Mleziva et al. US 6,410,138 and Handbook of Fiber Chemistry, 3rd edition. This is the sole ground of rejection on appeal.

According to the rejection, it would have been obvious to add the attenuation process and air permeable belt process of Geus et al. to the process of Hills, and it would have been obvious to use reclaim polypropylene as described by Mleviza et al. The rejection further asserts that it would have also been obvious to use the combination of reclaim polypropylene and virgin polypropylene.

7. ***Argument.***

To establish a *prima facie* case of obviousness, three basic criteria must be met: 1) the prior art reference (or references when combined) must teach or suggest all the claim elements; 2) there must be some motivation to combine the references; and 3) there must be a reasonable expectation of success.